

Claims

1. Method for the production of dual-layer slabs comprising a first layer of conglomerate formed from a mix comprising a granular material, a filler and a hardening resin and a second layer, or rear layer, formed from a mix comprising a hardening resin which is identical to, or compatible with, that forming said first layer,  
5 and a granular material of a light weight, which comprises the following steps:

(a) preparation of a mix consisting of a hardening resin and a granular material intended to form the visible side of the final slab article;

(b) deposition of the mix in the form of a thin layer - referred to below as first layer - on a support consisting of rubber or similar elastic material - or first rubber sheet - lined with a separating material;

(c) deposition, on the free surface of the first layer, of a web of continuous glass filaments pre-impregnated with a hardening resin identical to, or compatible with, that forming the mix of said first layer;

(d) deposition, on top of said web, of a layer, - referred to below as second layer - of a mix formed by a hardening resin having a nature identical to, or compatible with, that present in said first layer, by a filler and by a light granular material, the said hardening resin being present in the mix with a volumetric percentage substantially equal to that present in said first layer;

(e) application, on top of the free surface of said second layer, of a second sheet of rubber or elastic material lined with separating material;

(f) vacuum compaction by means of application of a pressure on top of said second rubber sheet and simultaneous application of a vibratory movement of predetermined frequency;

(g) hardening of the hardening resin by means of the action of heat and/or a catalyst;

(h) finishing of the resultant slab article;  
wherein a filler in the form of a fine powder is added to said mixes.

2. Method according to Claim 1, characterized in that said light granular material present in the mix of said second layer is an expanded inorganic material with a substantially spheroidal form, the granules having a size of between 0.1 and 6.0 mm.

3. Method according to Claim 2, characterized in that said light granular material is chosen from expanded glass, expanded clay or other expanded inorganic

materials such as alumina.

4. Method according to Claim 1, characterized in that said hardening resin is preferably an epoxy resin or a polyester resin.

5 5. Method according to Claim 4, characterized in that an organofunctional silane is added to the polyester resin.

10 6. Method according to Claim 1, characterized in that said granular material present in said first layer, intended to form the visible side of the resultant slab or board article, is chosen from natural stone materials such as marble, granite, porphyry, quartz, etc. and man-made materials such as ceramic materials or other materials of lithoid appearance, such as glass, silicon, shells, metals, etc.

7. Method according to Claim 1, characterized in that said filler is chosen from quartz or carbonate powders.

8. Method according to Claim 7, characterized in that said quartz is in the form of powdered cristobalite.

15 9. Dual-layer slab article obtained by the method according to any of the preceding claims.

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